The Economist

AN INDEX OF BUSINESS ACTIVITY.

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This Supplement is devoted to the presentation and description of our new Index of Business Activity, which was referred to in a note on page 274 of the ECONOMIST *of August 5, 1933. The Supplement contains charts and figures not only of the final index but of each of the component series, together with a description of the methods of calculation. Comment on the lessons to be drawn from the index will be found in a Leading Article in this week's issue. We propose in future to publish the index number in each issue of the Monthly Trade Supplement which is included in the* ECONOMIST *on the fourth week of each month.*

CONSTRUCTION OF THE INDEX.

THE Index of Business Activity is composed, in the main, of the indices which have for some years past been printed in our Monthly Trade Supplement. These indices are all based upon the year 1924 and are available from the beginning of that year. It was thought that, with nearly ten years' figures to draw upon, the combination of these indices into one index, intended to show the fluctuations in the whole economic activity of the country, would be possible. Various statistical difficulties, however, had to be surmounted. The indices hitherto published in the *Economist* have always been corrected, where necessary, for price fluctuations, but no attempt was made at their inception to remove the seasonal fluctuation. This has now been done for each series separately. The years during which the figures are available, however, do not provide a particularly good criterion of "normal" seasonal fluctuations. They include the General Strike and the coal dispute of 1926 and the wholly abnormal conditions of the last three years. It has been thought best to take as "normal" for most of the series the four years 1924, 1925, 1928 and 1929 together with a "composite year" made up of the first four months of 1926 and the last eight months of 1927. This is admittedly a narrow base for computing "normal" seasonal movements, but the only alternative seemed to be postponement of the construction of the Index in the possibly vain hope that a greater number of normal years would shortly be available. In some series the seasonal fluctuation is changing (e.g., Postal Receipts) and it would be impossible to apply the same correcting factors throughout the period without distorting some of the years. The question of seasonal fluctuations will have to be reconsidered when the Index comes up for revision. In the meantime, it is felt that although the seasonal corrections which have been applied may not be precisely accurate, they are the best that can be achieved with the available material; the final Index does not give any indication of suffering from seasonal distortion.

The indices have hitherto been printed in the form of three-months' moving averages. For the purpose of computing the combined Index, however, the actual monthly figures have been used, and these figures, corrected for seasonal fluctuation and for price movements, where necessary, will be printed in the Trade Supplement in the future in place of the former series. Of the eighteen existing series, two were rejected as unfit for inclusion in the combined index. These were the index of Rubber Consumption, whose fluctuations are too violent and arbitrary, and the index of Foreign Trade Turnover, which is only available quarterly. In their place, two new indices have been included, those of Motor Vehicle Registrations and Building Activity. These indices, although based upon the average of the year 1924, are not available in monthly form before June, 1928, and March, 1928, respectively. Annual average figures are, however, available for the missing years. For the period between 1924 and 1928 it has consequently been assumed that the progress shown by the annual figures was achieved at a constant rate between June of one year and June of the next. This, again, is an arbitrary assumption, but one which had to be made if these two series were to be included. The effect of the inclusion of these two series in such a form is, therefore, to modify very slightly the trend of the Index for the four years in question, but not to affect in more than an insignificant degree the month-to-month movements.

The Index is composed of eighteen component series. A brief description of each of these follows:—

Employment (four series).—These indices are constructed from the Ministry of Labour figures of the number of insured persons in employment. The "Heavy Trades" index, includes coal-mining, the metal trades and shipbuilding. The "Distributive Trades, etc.," index includes the clothing trades, transport and public utilities, food, drink and tobacco and the distributive trades.

Consumption of Coal.—This index represents the output of coal, in tons, less exports (including foreign bunker coal) and an allowance for consumption of coal in the production of iron and steel. Corrected for seasonal fluctuation.

Consumption of Electricity.—Based on the B.E.A.M.A. index, corrected for the gradual transfer from private to public generation and for seasonal fluctuation.

Merchandise on Railways.—Based on the figure of general merchandise carried on standard-gauge lines of Great Britain. The figure is in tons and excludes livestock (except for the years 1920-23), coal and other minerals. Corrected for seasonal fluctuations.

Postal Receipts.—Based on the Post Office figures of monthly receipts. Corrected for seasonal fluctuation.

Motor Vehicle Registrations.—Based on the Ministry of Transport returns of vehicles registered for the first time. Motor-cycles are excluded. For the years before 1928 annual figures for production plus imports less exports have been used. Corrected for seasonal fluctuation.

Building Activity.—Based on the Board of Trade indices of building activity in dwelling-houses and other forms of building in 146 towns, excluding London. A composite index is constructed by weighting the Board of Trade "dwelling-house" index twice as much as the "other buildings" index. This composite index is then corrected by a specially calculated index of building costs. A three-months' moving average is then calculated, since the indices refer to plans approved, and the actual volume of current activity depends upon plans approved for some time previously. Finally, the index is corrected for seasonal fluctuation.

Consumption of Iron and Steel.—Based on the output of pig iron plus the pig equivalent of imports less the pig equivalent of exports.

Consumption of Cotton.—Based on net imports with an allowance for variation in stocks of raw cotton at Liverpool. Corrected for seasonal fluctuation.

Imports of Raw Materials.—Based on the value of imports less re-exports, corrected by the Board of Trade quarterly index of average prices. Corrected for seasonal fluctuation.

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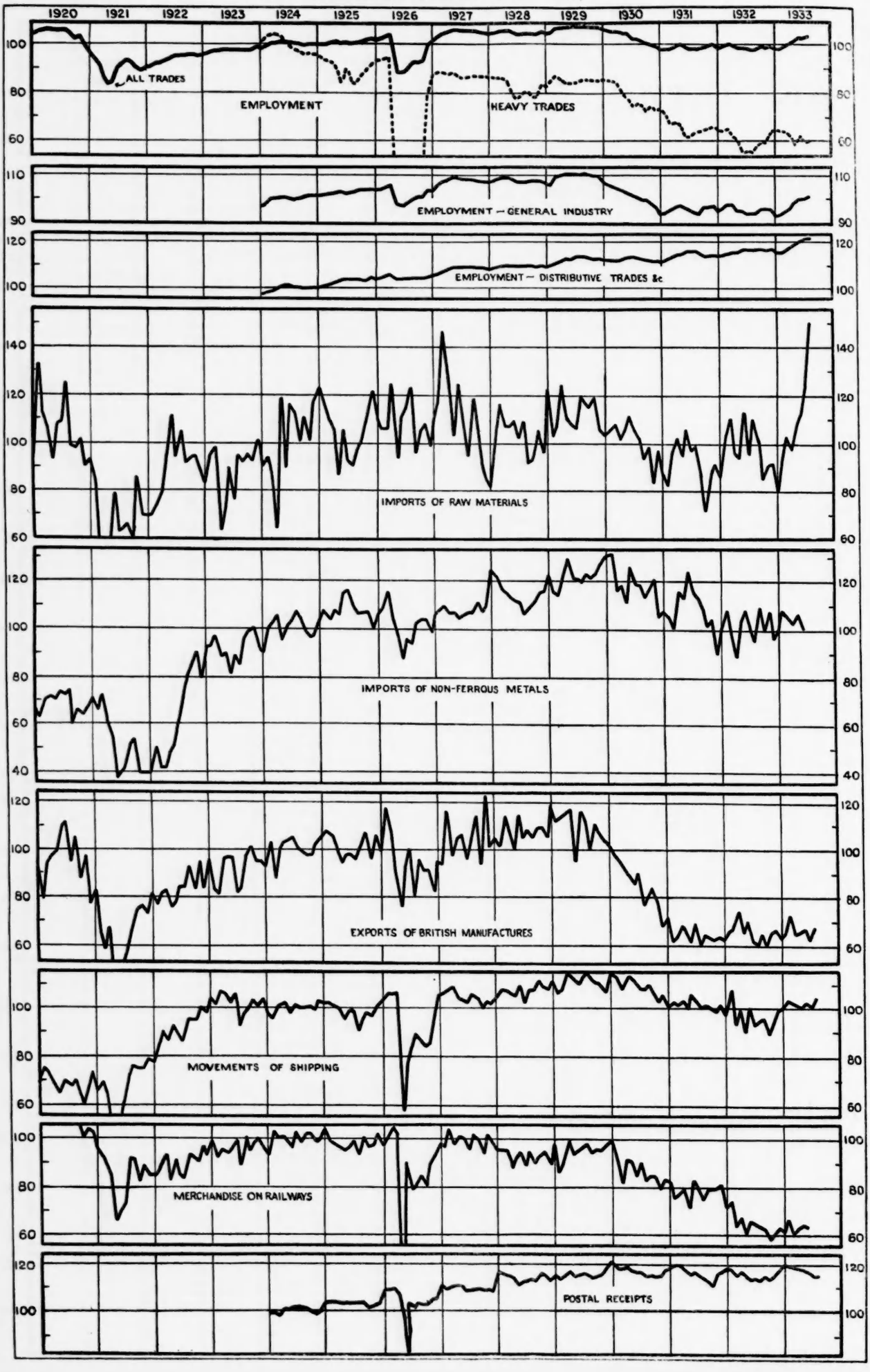
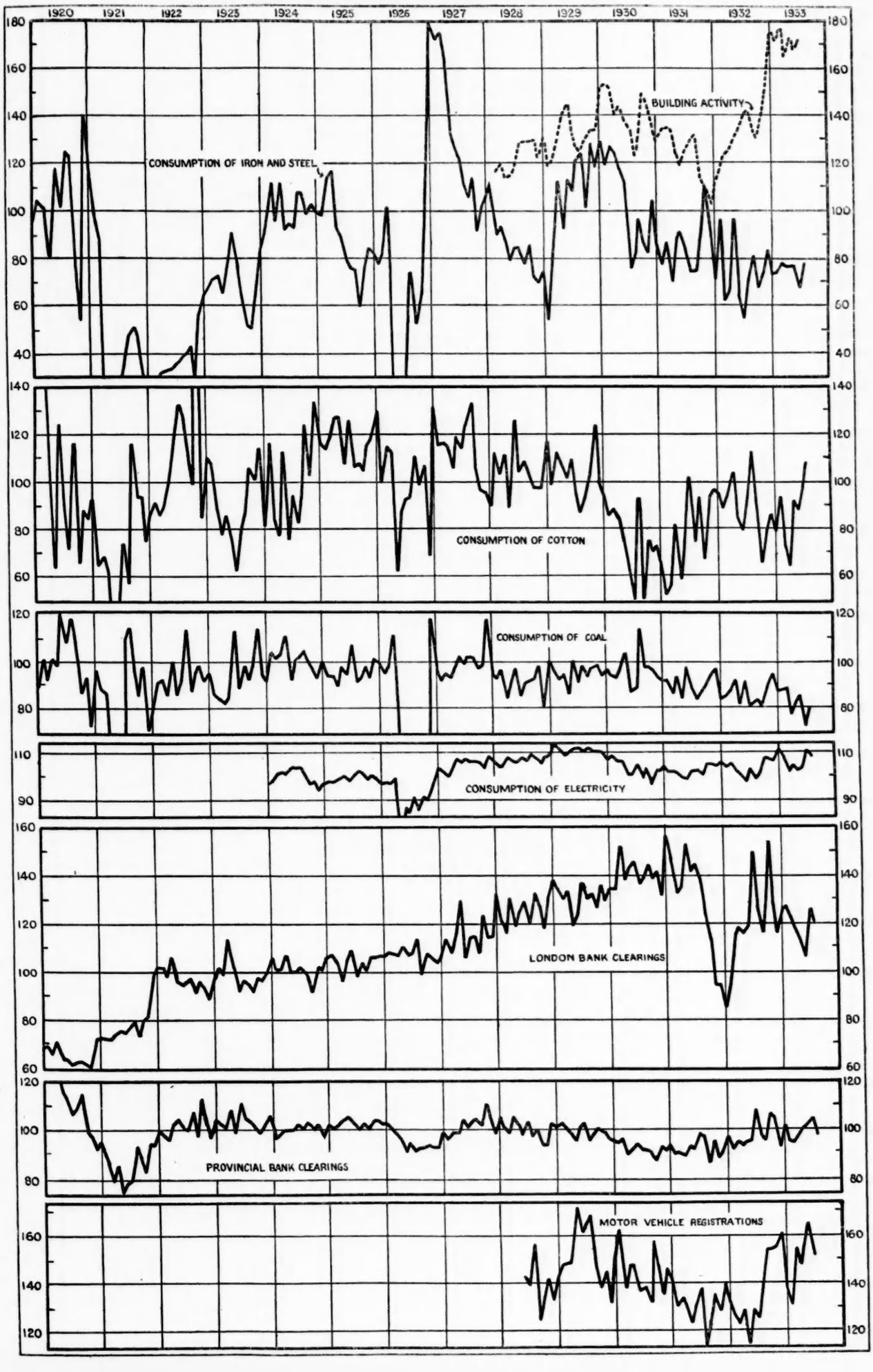
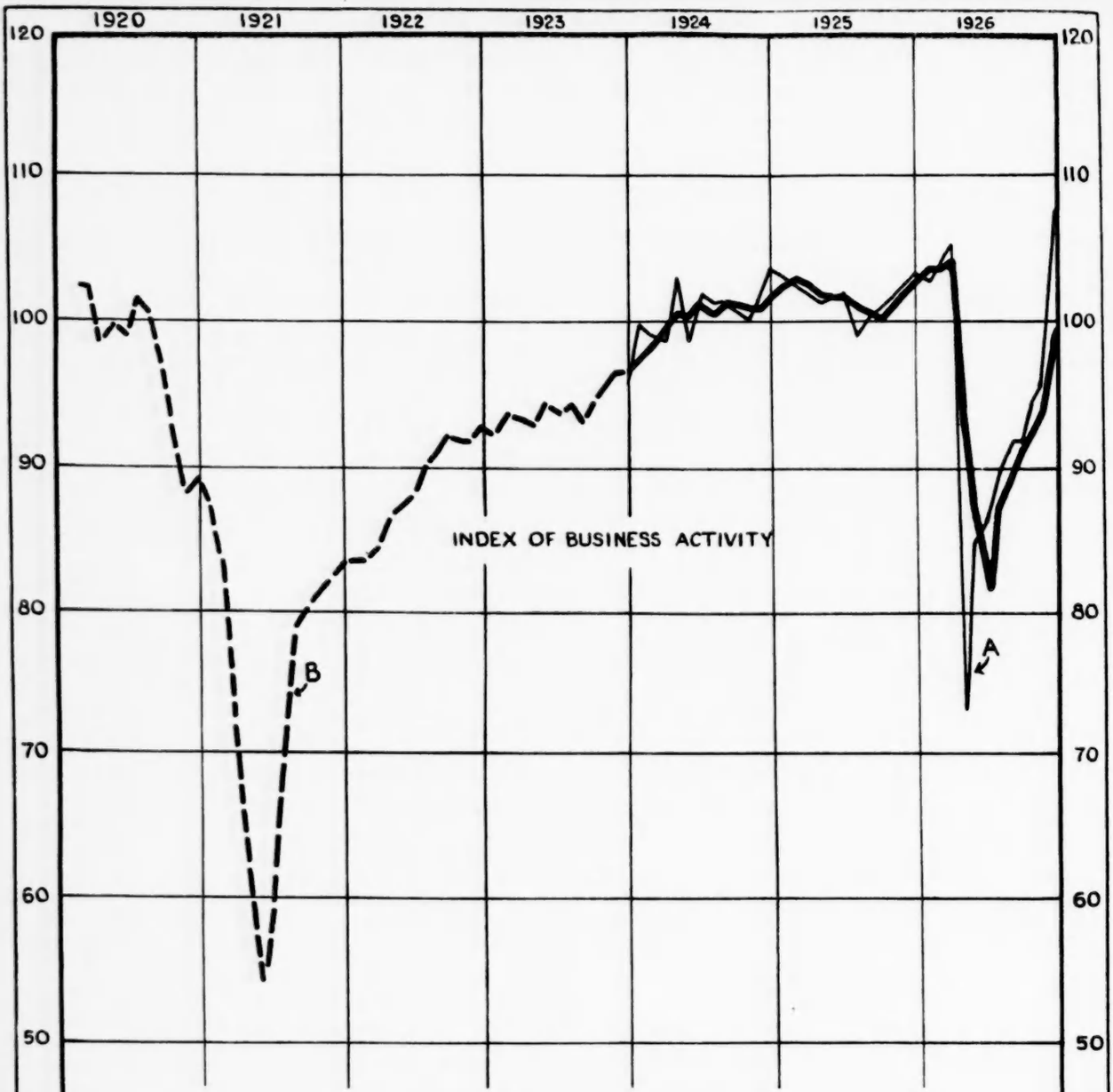
THE COMPONENT SERIES. (1924=100.)



THE COMPONENT SERIES. (1924=100.)



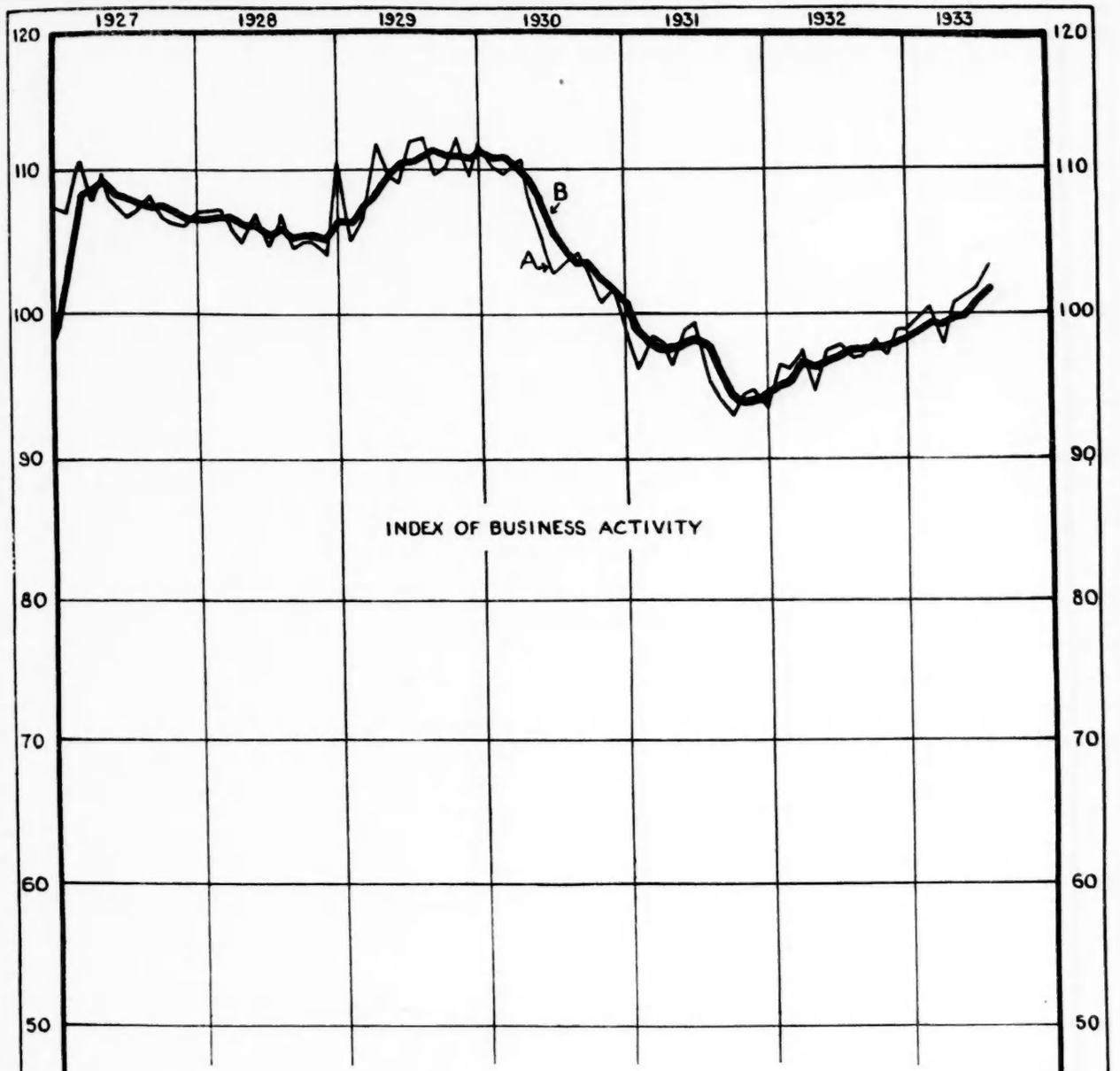


INDEX OF BUSINESS ACTIVITY.

(Average of 1924 = 100).

	1920.		1921.		1922.		1923.		1924.		1925.		1926.	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Jan.	102·1	...	90·4	89·4	82·7	83·5	95·3	92·9	95·6	96·3	103·6	101·6	103·2	102·9
Feb. ...	104·3	...	82·7	87·4	83·3	83·5	92·9	92·3	99·8	97·2	102·8	102·6	102·8	103·4
Mar.	101·0	102·5	76·8	83·3	84·2	83·4	93·1	93·8	99·0	98·1	102·7	103·0	104·3	103·4
April ...	101·2	102·2	57·8	72·4	85·9	84·5	93·7	93·2	98·9	99·2	102·0	102·5	105·2	104·1
May	93·9	98·7	51·1	61·9	88·8	86·3	91·9	92·9	103·2	100·4	101·1	101·9	73·0	94·2
June ...	104·5	99·9	54·4	54·4	87·0	87·2	98·3	94·6	98·6	100·2	101·7	101·6	84·9	87·7
July ...	99·3	99·2	72·5	59·3	88·1	88·0	90·7	93·6	101·6	101·1	101·8	101·5	86·2	81·4
Aug.....	101·2	101·7	80·6	69·2	95·3	90·1	94·5	94·5	100·6	100·3	99·0	100·8	89·8	87·0
Sept. ...	101·6	100·7	81·5	78·2	89·3	90·9	93·3	92·8	101·1	101·1	100·2	100·3	91·9	89·3
Oct.	86·9	96·9	78·6	80·2	91·9	92·2	95·8	94·5	100·9	100·9	100·8	100·0	91·5	91·1
Nov. ...	88·8	92·4	83·5	81·2	94·6	91·9	97·1	95·4	100·0	100·7	101·3	100·8	94·2	92·5
Dec. ...	89·0	88·2	84·4	82·2	88·8	91·8	96·3	96·4	101·3	100·7	104·2	102·1	95·6	93·8
Year	97·8	...	74·5	...	88·3	...	94·4	...	100·0	...	101·8	...	93·6	...

A.—Monthly Index. B.—Three Months' Moving Average of A.



INDEX OF BUSINESS ACTIVITY.

(Average of 1924=100).

	1927.		1928.		1929.		1930.		1931.		1932.		1933.	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B
Jan.	107·5	99·1	106·8	106·6	110·4	106·6	111·8	111·2	99·2	100·4	93·4	94·0	98·6	98·2
Feb. ...	107·2	103·4	107·1	106·7	105·0	106·4	110·2	110·5	96·0	98·9	96·4	94·8	99·4	98·9
Mar.	110·6	108·4	107·2	107·0	107·4	107·6	109·7	110·6	98·2	97·8	95·8	95·2	100·3	99·4
Apr. ...	108·1	108·6	106·5	106·9	112·0	108·1	110·2	110·0	97·4	97·2	97·1	96·4	97·9	99·2
May	109·2	109·3	104·6	106·1	109·7	109·7	108·1	109·3	96·2	97·3	94·7	95·9	100·5	99·6
June ...	108·4	108·6	107·0	106·0	108·9	110·2	105·5	107·9	98·8	97·5	97·1	96·3	100·9	99·8
July ...	106·9	108·2	104·7	105·4	112·0	110·2	102·8	105·5	99·2	98·1	97·6	96·5	101·1*	100·8*
Aug.....	107·5	107·6	106·7	106·1	112·2	111·0	103·6	104·0	95·2	97·7	97·1	97·3	104·1*	102·0*
Sept. ...	108·2	107·5	104·7	105·4	109·9	111·4	103·8	103·4	94·0	96·1	97·3	97·3	...	...
Oct.	107·1	107·6	105·6	105·7	110·1	110·7	103·1	103·5	93·1	94·1	97·7	97·4	...	...
Nov. ...	106·6	107·3	105·6	105·3	112·3	110·8	100·5	102·5	94·1	93·7	97·2	97·4	...	...
Dec. ...	106·3	106·7	103·9	105·0	109·5	110·6	101·6	101·7	94·5	93·9	98·7	97·9	...	...
Year..	107·8	...	105·9	...	110·0	...	105·9	...	96·3	...	96·7	...	...	...

A.—Monthly Index. B.—Three Months' Moving Average of A. * Provisional.

THE COMPONENT SERIES.

EMPLOYMENT—ALL TRADES.

	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.
January	104	96	90	96	98	100	102	102	104½	104	106	98	98½	98
February	105½	94	90½	96½	99½	100	102½	103	105	104½	105	98	99	98
March	106	91½	92	97½	100½	100	103½	104½	106	107	105	98½	100	99
April	106½	86	92	97½	100½	101	104½	105	106	107½	105	99	99	100
May	106	83	93½	98	101	101	88½	106	106	107½	104	100	98½	101
June	106	84	94	98	101	100	88½	106	105	108	104	99	98½	102
July	106½	89½	95½	98	100½	101	89	105½	104	108	102	98½	98	102
August	106	92	95½	98	100	100	90	105½	104	108	102	98½	97½	103
September	105½	93½	95½	98	100	100½	93	105½	104½	108	101	98	98	...
October	102	93	96	98	99½	101	92	105½	104	108	100	99	99	...
November	103½	90	96	98	100	102	93	105	104	107½	100	99	98½	...
December	99½	89	95½	99	100	102½	100	105	105½	107½	99	100	99	...
Year	105	90	94	97½	100	100½	99½	105	105	107	102½	99	98½	...

EMPLOYMENT—HEAVY TRADES.

January	...	...	...	...	100½	96	93	87	86½	82½	85	73	64	63½
February	...	...	...	...	103½	94	93½	88½	86	85	84½	71	63½	63½
March	...	...	...	...	104	93	93½	88½	86½	87	84	67	64½	63
April	...	...	...	...	103½	92½	94½	87	85½	85½	82	68	61	61
May	...	...	...	...	103	90	27½	88½	83	84	78½	67	60	58
June	...	...	...	...	101½	83	27	87	79½	83½	77	61	54½	61
July	...	...	...	...	100	90	28	85½	77	83½	73½	61	55	59
August	...	...	...	...	98	84½	31	86	78½	84½	75½	63	54½	60
September	...	...	...	...	97½	83½	34	86½	80½	85	74½	63	57	...
October	...	...	...	...	96	86½	39	86½	78½	84½	71½	64	59	...
November	...	...	...	...	96½	89½	45½	86	78	84½	74	65	59	...
December	...	...	...	...	96	92	79½	86½	83	84½	72½	66	63	...
Year	...	...	...	...	100	89½	57	87	82	84½	77½	65½	59½	...

EMPLOYMENT—GENERAL INDUSTRY.

January	...	...	...	...	97½	101½	103½	103½	107	106½	106½	94	95	93
February	...	...	...	...	98½	101½	104	105½	108	105½	105½	94½	96	94
March	...	...	...	...	100	102½	105	107½	109	109½	104½	96	98	95
April	...	...	...	...	100	102½	106	108	109	110	104	97	98	96½
May	...	...	...	...	100½	103	98	109	109	110½	103	97½	95½	99
June	...	...	...	...	100½	103	97½	109	108	110½	102	96½	95½	100
July	...	...	...	...	100	102	97½	108½	107	110½	101	95	94½	100
August	...	...	...	...	99½	102½	99	108½	107	110½	100	94	94½	101
September	...	...	...	...	100	103½	99½	108½	107	110½	99½	94	94½	...
October	...	...	...	...	100½	104½	100½	108	108	110	99½	97	96½	...
November	...	...	...	...	101½	104½	100½	107½	108	109½	98½	97	96½	...
December	...	...	...	...	101½	104½	103½	107½	108	109½	96	97½	96	...
Year	...	...	...	...	100	103	101	107½	108	109½	101½	96	96	...

EMPLOYMENT—DISTRIBUTIVE TRADES, &c.

January	...	...	...	...	97½	100	103½	105	108½	109½	112	111	114	115
February	...	...	...	...	98½	100½	104	106	109	110	112	112	114½	115
March	...	...	...	...	99	101	105	107	109½	111	112	114	115	116
April	...	...	...	...	99½	102	106	108	110	112	112	115	116	118
May	...	...	...	...	100½	103	103½	109	110	113	113	115	116	119
June	...	...	...	...	101	104	104	109	110	112½	113½	116	117	120
July	...	...	...	...	101	104	104	109½	110	114	113½	116	117	120½
August	...	...	...	...	100½	104	104	109½	110	114	113	116	117	121
September	...	...	...	...	100½	104	104½	109½	110	114	112½	115	117	...
October	...	...	...	...	100	103½	104	109	110	113	112	114	117	...
November	...	...	...	...	100	103	104	109	109½	112½	111	114½	116	...
December	...	...	...	...	100½	104½	105	109	110	113	111½	114½	117	...
Year	...	...	...	...	100	103	104	108½	109½	112½	112½	114½	116	...

CONSUMPTION OF COAL.

January	89	96	83	94	91½	100½	99½	96	94	100½	96	91½	83½	87
February	100½	88	91	86	104½	94	95	92	93	96½	94	91½	84½	87½
March	92½	86½	92	84½	101½	94	98½	94	96	92½	92½	86	87	88
April	101	−12	86	83	103	90	111	93	85	94	96	93	92	77
May	99	− 1½	100	84½	111	98	−13	98	91	86½	104	84½	81½	83
June	120	0	86	111½	92½	95	15½	102	97	101	87½	97	91	85
July	109	109½	92	88½	100½	108	32½	99½	85½	90½	88½	87½	81	72½
August	118	114	113	98	101½	91½	53	101½	90½	98½	113	83½	82½	80
September	108	96	87½	92½	105	92	60	101½	92	94	97½	86½	84½	...
October	87	86	95	98	101	98	59	97	93	97	97	88½	80½	...
November	93	97	98	114	97	93	64½	98	98	98	96	94	90	...
December	73	94	87	88	93	101	118	118	80½	94	93	96	94	...
Year	99	71	92½	93½	100	96	66	99	91½	95	96	90	86	...

CONSUMPTION OF ELECTRICITY.

January	...	...	...	...	97½	97½	97½	104	106	109	107	104	105½	111
February	...	...	...	...	98	98½	98	102	104	114½	109	101½	104	107
March	...	...	...	...	101	98	97	100	104½	111	106	102½	105	101
April	...	...	...	...	102	99½	99½	103½	108	109	106	100½	102	104
May	...	...	...	...	101	100	79½	107	106	110½	100	99	100	102
June	...	...	...	...	104½	98	87	106	106	112	100½	99	98½	103
July	...	...	...	...	103½	100½	85	107	108	112	105	102	103	110½
August	...	...	...	...	104	102	92	105½	106½	110	99	103	99	108½
September	...	...	...	...	100	101½	86	106	109	112	103½	100½	101½	...
October	...	...	...	...	97	99	92	106	107	110½	96½	105	108	...
November	...	...	...	...	98½	100½	90½	103½	105	110	102½	105	107	...
December	...	...	...	...	95	99	96½	108	108½	110	102	104½	106½	...
Year	...	...	...	...	100	99½	91½	105	106½	111	103	102	103½	...

MERCHANDISE ON RAILWAYS.

January	124	95	85	98½	93	104	97	98	95	98	99	82	71½	61
February	120	92½	88	92½	103½	99	100	97	95½	86½	90½	76	74	67
March	121	89	93	95	99½	97	105	104½	95	89½	81½	77	64	60½
April	112	85	83	94	100½	96½	101	98	87½	99	91	79½	67½	62
May	109	66	91	95½	102½	95	50½	101	92	94	90	71½	60½	64½
June	117	70	85½	99	96	96½	90½	99½	94½	95½	85	83	66	63½
July	112	73	83	88	103	99	79	95½	89	97	90	80	65	...
August	112	92	93½	100	98½	93	80½	101½	94½	98	83	75	63½	...
September	117	91	92	95	102	100	85	99½	90	94	85	79	62	...
October	101	82½	90½	99	102	96	81	94	93	95½	84½	79	58	...
November	104	89	97	100	98	97	89	101½	95	95	79½	79½	60	...
December	103	85	93½	95	99	102	93½	98	89½	98	83½	81½	63	...
Year	112½	84	89½	96	100	98	87½	99	92½	95	87½	78½	64½	...

POSTAL RECEIPTS.

January	...	...	...	...	99	104	109	110½	117½	115½	121	119½	119	120
February	...	...	...	...	99	104½	109	109½	115½	113½	118½	120	118	119½
March	...	...	...	...	98	104½	109½	110	115½	115½	118	120	115	119
April	...	...	...	...	101	103½	107	110½	114½	117½	119	117½	117½	118
May	...	...	...	...	100	104	81½	110½	110½	114½	117	115	114	118
June	...	...	...	...	102	103½	104	108	112	115	116½	117½	113	117
July	...	...	...	...	102	104	102	109	112	116½	117½	115½	114½	115
August	...	...	...	...	101½	104	103½	109½	113½	115	114½	114	113	115½
September	...	...	...	...	101	104½	102½	109½	112½	113½	115½	112½	115	...
October	...	...	...	...	99	101	102½	108½	116½	115	114½	110½	113	...
November	...	...	...	...	98	102½	105½	109½	115	115½	115	116½	115	...
December	...	...	...	...	99	103½	105	108½	112½	120	118½	118	118½	...
Year	...	...	...	...	100	103½	103½	109½	114	115½	118	116½	115½	...

MOTOR VEHICLE REGISTRATIONS.

January	...	...	...	...	...	...	...	...	...	143	151	142	131	138
February	...	...	...	...	...	...	...	...	...	148	162	130½	127	130½
March	...	...	...	...	...	...	...	...	...	149	138	134	123½	154
April	...	...	...	...	...	...	...	...	...	149	148	129	129	148
May	...	...	...	...	...	...	...	...	...	171	148	123½	114½	186
June	...	...	...	...	...	...	...	...	143	162	137	130½	129	165
July	...	...	...	...	...	...	...	...	139	165	138	138	126	154
August	...	...	...	...	...	...	...	...	156½	168	132	114	138	172½
September	...	...	...	...	...	...	...	...	124½	147	158	122½	154	...
October	...	...	...	...	...	...	...	...	135	138	146	135	154	...
November	...	...	...	...	...	...	...	...	142	145	135	129	155	...
December	...	...	...	...	...	...	...	...	132½	131	146	139	161	...
Year	...	...	...	...	100	120	121	134	136	151½	145	130½	137	...

BUILDING ACTIVITY.

	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.	1928.	1929.	1930.	1931.	1932.	1933.
January	...	...	...	...	...	...	...	...	...	130	152	129	112	174½
February	...	...	...	...	...	...	...	...	...	118	154	134½	115½	171
March	...	...	...	...	...	...	...	...	116½	123	152	135	124	177
April	...	...	...	...	...	...	...	...	119½	131	140	133½	125½	165
May	...	...	...	...	...	...	...	...	114	141	144	124	129	172
June	...	...	...	...	...	...	...	...	114	146	137½	119	134	166
July	...	...	...	...	...	...	...	...	118	134	135½	126	140	171½
August	...	...	...	...	...	...	...	...	129	127	123	130	143	
September	...	...	...	...	...	...	...	...	129	124	134	132	134	...
October	...	...	...	...	...	...	...	...	129	130	149½	113	130	...
November	...	...	...	...	...	...	...	...	129½	134	142½	106	139	...
December	...	...	...	...	...	...	...	...	122	134	136	101½	152	...
Year	...	...	...	...	100	116	119	116	122	131	141½	123½	131½	...

CONSUMPTION OF IRON AND STEEL.

January	96	118	21	65	85	100	83	179	106	74	131	87	71	73
February	105	99	22	68	92	99	78	172	111	53	119	78	97	74
March	102	86	22	71	112	114	82	175	90	83	127	87	62	78
April	101	— 2	32	72	96	117	102	162	94	112	125	70	66	77
May	81	— 2	33	65	112	93	—13	134	88	93	117	89	97	76
June	118	5	33	81	93	90	7	129	80	113	112	91	64	77
July	102	12	35	91	95	80	7	122	85	109	76	84	55	68
August	125	36	38	76	94	76½	38	112	85	121	83	74	71	78
September	123	48	40	63	108	76	74	106	78	125	97	74	81	...
October	76	51	43	52	108	60	53½	113	86	111	86	89	68	...
November	55	47	30	50	99	76½	65	92	72	129	83	110	73	...
December	140	32	57	70	103	85	109	102	70	119	105	95	84	...
Year	102	44	34	68½	100	89	57	133	87	103½	105	85½	74	...

CONSUMPTION OF COTTON.

January	200	92	86	110	81½	116	129½	131	90	117	95	66	95	79
February	180	65½	91	108	116½	114½	100	115½	111½	89½	86½	53	89	93
March	165	48	86	88	84½	119	114½	117	103½	112½	88	56½	94½	72
April	142	62½	89	78	77½	127½	112	115½	111	108	84½	81½	103½	64
May	64	37½	100	86	113	128	62	106	89½	101½	74½	58½	85½	91
June	124	37½	117	76	76	108	87	119	125	109	62	74	80	88
July	90	73	132	62	95	126½	93	114½	104½	94½	50	102	90	97½
August	71½	57	126	80½	83	107	93	123½	108	87	93½	74	112	108
September	117	116	108½	86½	94	108	111	133	104½	93½	50½	93½	91	...
October	65½	94	99	106	124½	105½	99	106½	97½	103	75½	68	65½	...
November	88	94	166	101½	103	115½	106½	95	97½	124	71½	94	80	...
December	85	75	85	114½	133½	118	69½	95½	97	100	72	96½	85½	...
Year	116	71	107	91½	100	116	98	114½	103½	103½	75½	76½	89½	...

IMPORTS OF RAW MATERIALS.

January	93	93	69	83	90	123	111	110	82	122	103	87	86	80
February	133	83½	69	95	94	117½	106	117½	107	103	106	82½	103	94
March	112	52	74½	99	87	109	106	146	116½	107	108	96	110	103
April	106½	54½	79	63	64	106	125	122	107	123	101	102	96½	98
May	93½	56	96	72	119	86½	94	105	107	110	106	95	94	109
June	108	78½	111	89½	89½	105	111	124½	109	107½	111½	106½	113½	112½
July	109	63	94½	77	116	92½	114½	109	102	106½	105½	97	96	124
August	125	63½	105	95	112½	90	123	95	109	120	102	99	110	150
September	99	65½	91	92	100½	97	96	119	91	117	93½	85½	100½	...
October	98	60	94	95	111	100	105	105	93	115	99	71	85	...
November	101	86	95	92½	101	111	108	92	105½	119	83½	88	91	...
December	90	69	89½	101	117	121	99	85	96½	107	97½	91	91½	...
Year	105½	69	89	88	100	105	108	111	102	113	101½	91½	98	...

IMPORTS OF NON-FERROUS METALS.

January	67	70½	39½	92	90	104	107	106	125	123	131	107	100	100
February	63½	66	50	92½	100	108	109	108	121½	115½	131½	105	108	108
March	70½	71½	41½	96½	102	104	115½	110	116½	114½	116½	100	98	106
April	72	61	41½	88½	106	108	104	106	115	123	118	116	89	102
May	70½	55	48½	89½	95	106½	96	106½	113	129½	111½	113	103½	106
June	74	37½	51	81½	101	115½	88	104	112	120½	126½	123½	108	100
July	72	39½	60½	89	103	116½	96	105	111	120½	118½	115½	101	...
August	74	42½	72	85	107	110	94	107	106	119½	118	113	95	...
September	60	52	80½	96	104	106	102	107	109	123	113½	108	109	...
October	66	53½	85	99	98½	107	104	111	112½	121	116½	101	99½	...
November	64½	39½	90	100	96½	107	103	107	115½	123	121	104	107	...
December	67½	39½	79½	91	97	100	98	109½	116	127½	105½	90	96	...
Year	68½	52½	61½	91½	100	107½	101½	107	114½	121½	119	108	93	...

EXPORTS OF BRITISH MANUFACTURES.

January	95	83	81	96	92½	105	99½	95½	105	118½	102	71½	62½	62½
February	79	62½	77½	83	103	108	107	94	101	101	97	61½	66	63
March	94	59	80½	82½	88	105	108½	106	114½	103	96	63	67	72
April	97	67	83	96	100	98½	90½	97½	107	115½	92	68½	74	64
May	99	45	75½	97	103	94	76½	105½	100	117	89½	65½	65½	65½
June	110	44	77½	96	104	98½	93	106½	114½	95	86½	61½	70	67½
July	111	51	84½	81½	105½	98	100	96	105½	116	90	69½	61	62½
August	95	57	84	84	100	96	80½	104	108½	112½	77½	60	60	67½
September	105	67½	92	97½	99	101½	96	114	105	100	80	64½	64½	...
October	88	74	83½	100½	97½	107	90½	94	109½	110½	84½	63½	60	...
November	97	76½	95	95	98	96	91	122½	109½	108½	78½	62	65	...
December	77	73	84	95	102½	106½	82½	101	105	103	68	63	66	...
Year	95½	63½	83	92	100	101	93	102	107	108½	87	64½	65	...

MOVEMENTS OF SHIPPING.

January	69½	66	77	104	97½	101½	102½	105	104	111½	115½	100½	97½	100
February	75	69	84½	101	95½	102½	106	106	108½	106	113	102½	108½	104
March	73	65½	89½	107	100	100½	105½	108	108	107	108	101	93	103
April	68	51	86½	106	101½	100	107	109½	106	116½	112½	103½	99½	101
May	65	44	92	101	102	95	57½	104½	105½	112½	114½	100	90	100
June	70	50½	89	106	98	99	78½	104	109½	110½	110½	106½	100	103
July	69	61	86	92	101	99	83½	102½	102	114½	108½	103	93½	100
August	68	72½	95½	97½	99½	90	89	106½	107½	116	108½	100½	95	105
September	70	76½	94½	99	100	95½	87	104½	107½	111½	110½	101	96½	...
October	59½	74½	95	103	100½	98½	84½	100½	111½	110½	106	99½	89½	...
November	66	75	100	101	99	97	85	103	109	110	103	99	94	...
December	74	79	98	103	103	101	99½	102	108	107	106	102	99	...
Year	69	65½	90½	101½	100	98½	90½	104½	107	111	109½	101½	96½	...

PROVINCIAL BANK CLEARINGS.

January	130	95	100	104	96	102	102	99	106	101	95½	93	97	101
February	127½	86	97½	101½	97	100½	100	96	100½	102½	94½	89½	91	95
March	115½	79	96	100½	99½	102½	98	99	99	100½	96	89½	95	94
April	122	85½	103	109	100	104	96	99	105½	98	89	89	93	97
May	115	73	104½	99	100	105	90	104	102	95	90½	92	94	100
June	113	78½	100	110	102	103	93½	101	98	101	93½	91½	94½	101
July	107½	79½	99½	105	100	100	90	103	103	102	90½	98	109	105
August	109	93	108½	103	102½	102½	91	105	97½	95	90	97½	97½	97½
September	115	88	97½	100½	101½	100½	91½	101½	99½	98	88½	86	96	...
October	99	83	112	99	100	104	93	110	93	100	87½	95	107	...
November	98	94	102	100½	102	104	92	105	93	99	92	88	105	...
December	92	93	97	106	98	102½	92	99	102½	96	90½	89½	92	...
Year	112	86½	101½	102½	100	102½	94	101	100	99	91½	91½	97½	...

LONDON BANK CLEARINGS.

January	68½	73	102	98	106½	106	107	105½	132	138	134	156	85	126
February	70	72	102	101½	101	107	109	113	121	135	134	146	94	127
March	66	72	98	99	101	104	108½	108½	116	130	152	132	115½	122½
April	71	74½	116	113	107	96	107	116	130	132	138	134	118	118
May	63½	76	96	102	100	105	110	129	119½	119½	143	153	116½	113
June	64	75½	94	92	100	109	108	106	125	124	145	141	119	106
July	61½	77	95½	96	101½	98	108	114	128½	137½	136½	144	150	126
August	63	79½	97	95	100½	104	113½	114½	120	130½	139	138	126	120
September	63	73½	90½	91	97½	100½	99½	108	132½	131½	144	123	116	...
October	62½	80	96	97	91	106	108½	123	127½	126½	139	112½	154	...
November	60½	82	92	96	102	106	107½	114½	118½	136	141	94	118	...
December	72½	98½	89	99	101	107½	104	114	130½	129½	131½	94	106	...
Year	65½	77½	89	101½	100	104	107½	114	125	131	140	130½	118	...

(*Continued from front page.*)

Imports of Non-Ferrous Metals.—A weighted average of imports (by volume) of tin, zinc, lead, copper ore, copper bars and manganese ore. Corrected for seasonal fluctuation.

Exports of British Manufactures.—Based on the trade returns, corrected by the Board of Trade quarterly index of average prices, and for seasonal fluctuations.

Movements of Shipping.—Includes entrances and clearings of foreign-going and general coasting ships. The figures are in net tons, and are corrected for seasonal fluctuations.

Provincial Bank Clearings.—Based on the monthly clearing figures, which are divided by the number of working days in the month, in order to arrive at an average daily figure. This figure is then corrected by the mean of the *Economist* index of wholesale prices and the Ministry of Labour index of the cost of living, and further corrected for seasonal fluctuations.

London Bank Clearings.—Includes the town, metropolitan and country clearings, calculated and corrected as above.

The original intention was to combine these indices in an unweighted arithmetical average, trusting to the multiplicity of series to present a true picture. The curve printed on page 275 of the *Economist* of August 5 was, in fact, an unweighted arithmetical average of sixteen of the eighteen series now included. On reflection, however, it was thought that although the general trend of the curve might be accurate enough, some of its detailed fluctuations were undoubtedly distorted by the sudden movement of one or more series whose importance in the economic life of the country was considerably exaggerated by the lack of weighting. The Index has, therefore, been recalculated in the form of a weighted arithmetical average. With component series of such widely divergent character the assignment of weights is necessarily an arbitrary proceeding. Four factors have to be borne in mind. In the first place, where the index refers to the activity of an industry, the size of that industry has to be considered. Secondly, some indices which on mere consideration of size would receive very small weights, deserve more prominence because of their excellence as indicators of the aggregate of business activity (e.g., Postal Receipts). Thirdly, some indices should receive smaller weights than those to which they would be entitled on considerations of size, either because they reflect expanding industries and are to that extent untypical (*e.g.*, Motor Vehicle Registrations) or because they are liable to sudden distortion by temporary factors (e.g., London Bank Clearings). Fourthly, some indices should have reduced weights owing to their inherent tendency to violent and arbitrary fluctuation (e.g., Consumption of Cotton). After balancing these considerations as well as may be the following weighting has been decided upon:—

Employment (Divided as follows: All Trades, 4; Heavy Trades, 1; General Industry, 3; Distributive Trades, etc., 3).	11	Consumption of Iron and Steel	2
Consumption of Coal	4	Consumption of Cotton	1
Consumption of Electricity	2	Imports of Raw Materials	2
Merchandise on Railways	4	Imports of Non-Ferrous Metals	1
Postal Receipts	3	Exports of British Manufactures	3
Motor Vehicle Registrations	2	Movements of Shipping	2
Building Activity	2	Provincial Bank Clearings	4
		London Bank Clearings	3
		Total	46

These weights can be grouped as follows:—

Employment	11	Other Home Industry	8
Power	6	Foreign Trade	5
Domestic Trade and Transport	9	Financial	7

For the purpose of this grouping, the series Imports of Raw Materials, Imports of Non-Ferrous Metals and Exports of British Manufactures have been divided equally between "Other Home Industry" and "Foreign Trade." The chief omission is that of any index of Retail Trade. Some consideration was given to the question of constructing an index from the figures published by the Bank of England, but in view of the unusual statistical hazards confronting any such attempt and the difficulty of devising a suitable index number of prices by which the value figures could be corrected, the attempt was abandoned. This lacuna in what is otherwise a very comprehensive index is greatly to be regretted, but we are not without hope that it may be corrected before long.

In spite of weighting and of the removal of seasonal fluctuations, the month-to-month movements of the Index are often in large measure accidental. The Index is therefore presented in two forms: the actual monthly figure and a three-months' moving average (i.e., an average of the last three months). Either form of presentation has defects, and to interpret the current movements of the Index both must be used together. For reading the history of the past, however, the three-months' moving average has obvious advantages, except in circumstances such as those of May, 1926, when a violently disturbing factor is suddenly injected.

Many indices of Business Activity, especially in the United States, are corrected in order to remove the secular "trend" or increase. No attempt to remove the trend from our Index has been made. The years over which it extends do not permit of any assumptions as to the normal trend of British business activity. It is worthy of notice, however, that a line indicating a steady rate of increase of about 1.8 per cent. per annum, starting from June, 1924, as 100, would run very close to the actual figures of the Index in the period January, 1924, to April, 1926, and again from August, 1927, to May, 1930.

It may be objected that the curve underestimates the extent of the cyclical swing of the economic pendulum and, in particular, that the descent from the relative prosperity of 1929 to the depression of 1931-3 is neither rapid nor extensive enough. Such criticism can best be anticipated by comparing this drop of 15.9 per cent. between September, 1929, and November, 1931, with the only other published estimate bearing on the same decline, that of Mr Colin Clark in his book "The National Income, 1924-31." Mr Clark estimated that the National Income in 1929 was 111.4 per cent. of the 1924 figure, and that the fall from 1929 to 1931 was 12.4 per cent. The average of our index in 1929 was 110.0, and the fall to the average of 1931 was 12.5 per cent. The correspondence is, in fact, too close, for since Mr Clark's figures are expressed in money values the decline shown by them should be greater than the decline in our index by as much as the general level of prices fell in the period in question. It follows either that the decline shown by Mr Clark's figures is too small or that that shown by our index is too great. We have already (*Economist*, October 29, 1932, page 770) expressed the opinion that Mr Clark's figures give an incorrect impression and the new index substantiates that opinion. But Mr Clark's estimates are a sufficient indication that our index at least does not underestimate the extent of the decline in activity since 1929. Amid so much exaggerated language of "breakdown" and "catastrophe" it is salutary to observe that the general level of economic activity in this country at no time fell below 84 per cent. of the highest figure it touched in 1929. The average level of the two years 1931 and 1932 was only 10.6 per cent. below the average level of the three years 1927 to 1929.

Some of the component series can be calculated for the years prior to 1924; others cannot. As many as possible of the series have been computed for the years 1920-23 and combined with the same weights as in the table above. The resultant index is necessarily tentative, as it omits many of the series later available, but for purposes of comparison it is shown in a dotted line in the chart on pages 4 and 5.

From much of the foregoing it will be clear that the Index is at present in an experimental stage. We believe that it gives valuable and interesting results, but we are far from claiming for it either perfection of statistical detail or infallibility of measurement of the phenomena it sets out to illuminate. We propose to revise it from time to time, and, in anticipation of those revisions, comments and criticisms will be of great value.

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